Efficiency and Quality in Cooking









Buy ingredients

Buy/rent equipment and space

Cost of Cooking

Cost of clean up

Good equipment (knives, stoves)
Skilled labor
Learning by doing (volume)
Specialization (skills and foods)
Proper preparation
Understanding client flow

These issues transfer to medicine

What is unique to health care is risk and uncertainty.

Arrow, Kenneth J. "Uncertainty and the welfare economics of medical care." *The American Economic Review* (1963): 941-973.

Cost of the Intervention: Labor

Labor mix has a big effect on costs

http://www.herc.research.va.gov/include/page.asp?id=labor http://vaww.herc.research.va.gov/include/page.asp?id=labor

- More info on VA labor cost on the intranet
- Pay can affect quantity and quality; attracts different types of people
- Need to include benefits (when appropriate)
- Need to include direct/productive and indirect/non-productive costs (e.g., meeting times)

BIA Example on Medical Care Management with Seriously Mentally III

Druss, Benjamin G., A. Silke, Michael T. Compton, Liping Zhao, and Douglas L. Leslie. "Budget impact and sustainability of medical care management for persons with serious mental illnesses." *American Journal of Psychiatry* (2011).





Outline and Conclusions of Study

- 407 Randomized Seriously Mentally III
 Psychiatric Outpatients to Usual Care or Care
 Coordinating Medical Care Manager
- Primary Care/Mental Health/Cardiometabolic Quality Clearly Increased
- 95% CI on Total Costs from Health System Perspective (-\$1973, +\$102), average -\$932
- But BIA Breakeven is at 58% of Clients having Medicaid or other Insurance, yet Medicaid rate is only 40.5%, so the program was NOT sustainable

Budget Impact Analysis Assessment and Assumptions

- BIA Requires Careful Assessment of Costs of Implementing an Intervention with a Managerial Perspective and Shorter-Term Time Horizon
- In this case at an urban Community Mental Health Center (CMHC) ONLY the services provided at the CMHC are considered for the BIA
- Visit Reimbursements are Considered at Medicaid rates
 BUT only some of the seriously mentally ill patients are
 Medicaid eligible, crucial to the BIA
- Careful Measurement of the Care Management
 Implementation Costs are Essential Since these are the
 Costs that must be balanced in the BIA

Implications for BIA Work

- The Budget Structure of the System that Determines Intervention Sustainability Varies by Setting with which Managers Consider which Costs for BIA and this is Essential to Understand
- Interventions have Value/Quality Outcomes that can be very Impressive, but we often have no idea of the BIA of Sustaining them
- Variations in Cost and Quality Outcomes Complicate the Challenges in doing Understandable and Effective Research

International Interest in BIA

			Inclusion other	
	Perspective	Time Horizon	costs	Discounting
Australia	Government	5 years	No	No
Canada	Drug plan	3 years	No	Yes
	Health and Social			
Ireland	System	5 years	Yes	Yes
Poland	Public purchaser	Until changes are minimal	Yes	Yes
ISPOR	Payer	Until changes are minimal	Yes	No
Annemans	Payer	3-5 years	Yes	No

Resources

- HERC web site
 - Guidebooks
 - Technical reports
 - FAQ responses
 - Slides from training courses (cyber-seminars)
- VIREC web site
 - Research user guides (RUGs) on DSS, PTF, OPC
 - Technical reports (pharmacy)
- HERC and VIREC maintain intranet sites that have more VA-centric information and data

Resources

- Decision models and economic evaluations frequently appear in these journals:
 - Medical Decision Making
 - Health Economics
 - Value in Health
- BIA papers sometimes struggle to find a home because they are so context specific

Resources

ISPOR recommendations on BIA:

Mauskopf J, Sullivan SD, Annemans L, et al. Principles of Good Practice for Budget Impact Analysis: Report of the ISPOR Task Force on Good Research Practices – Budget Impact Analysis. *Value in Health* 2007;10(5):336-347.

Sullivan SD, Mauskopf JA, Augustovski F, et al. Principles of good practice for budget impact analysis II: Report of the ISPOR Task Force on Good Research Practices – Budget Impact Analysis. *Value Health* 2014:17:5-14 http://www.ispor.org/budget-impact-health-study-guideline.pdf

VA-funded literature review on budget impact analysis:

Luck J, Parkerton P, Hagigi F.

What is the business case for improving care for patients with complex conditions?

Journal of General Internal Medicine 2007;22(Suppl 3):396-402